



Guidelines for Water Conservation Plans

August 6, 1998

On August 6, 1998 EPA issued guidelines for water conservation plans for public water systems. States may require water systems to submit a water conservation plan consistent with the EPA or any other guidelines as a condition of receiving a loan under the Drinking Water State Revolving Fund (SRF). The guidelines contain step-by-step approaches and conservation measures that can be used by water system planners to develop and implement plans for water conservation. Strategic use of water conservation can help extend the value and life of infrastructure assets used in both water supply and wastewater treatment, while also extending the beneficial investment of public funds through the SRF and other programs.

SAFE DRINKING WATER ACT PROVISION

Section 1455 of the 1996 Amendments to the Safe Drinking Water Act (SDWA) requires EPA to publish in the Federal Register guidelines for water conservation plans for public water systems of various sizes and to take into consideration such factors as water availability and climate. The SDWA also provides that States may require water systems applying for Drinking Water State Revolving Fund (SRF) loans to submit a conservation plan as a condition of receiving a loan.

APPROACH

EPA invited broad-based participation in the development of the Guidelines. A public workshop was convened in September 1997 as the first opportunity to obtain input on this important issue. We also formed a subcommittee under the Local Government Advisory Committee to obtain input on our efforts. Subcommittee representation included State agencies, local governments, water utilities, environmental groups, and various industry and public interest groups. The Subcommittee held five open meetings to develop recommendations for submission to the Agency. Public comments and Subcommittee recommendations mainly focused on the need to simplify the Basic Guidelines and the limiting effect of compartmentalizing measures. Several commenters felt that more measures should be recommended for small systems. EPA made changes to the guidelines to address those comments.

On August 6, 1998, we announced the availability of the final guidelines in the Federal Register. Printed copies of the Guidelines are available from the Office of Water Resource Center (202-260-7786) or electronically on EPA's web page at <http://www.epa.gov/OWM/genwave.htm>.

THE GUIDELINES

The Water Conservation Plan Guidelines are addressed to water system planners but use of the Guidelines is not required by federal law or regulation. States and Indian Tribes decide whether or not to require water systems to file conservation plans consistent with these or any other guidelines. Although a voluntary provision, the Guidelines may help bring conservation into the mainstream of water utility capital facility planning. The infrastructure needs of the nation's water systems are great. Strategic use of water conservation can help extend the value and life of infrastructure assets used in both water supply and wastewater treatment, while also extending the beneficial investment of public funds through the SRF and other programs.

The first part of the Guidelines provides information to the States about their nature and possible use. A number of topics are addressed: integrating water conservation and infrastructure planning, water conservation planning criteria, guidelines and measures; State roles; and current State programs. Also discussed is a modified approach for very small systems that suggests States assist systems' water conservation planning and implementation as part of their capacity-development efforts required by SDWA. The second part, written for water systems, is an overview of the organization, content and use of the Guidelines. The next three parts of the document contain the Guidelines: Basic, Intermediate, and Advanced. These categories correspond generally to system size:

- The Basic Guidelines are geared to systems serving fewer than 10,000 people.
- The Intermediate Guidelines are appropriate for systems serving between 10,000 and 100,000 people.
- The Advanced Guidelines are for systems serving more than 100,000 people.

Which Guidelines are appropriate also may depend on various factors and conditions affecting water systems and their need for conservation planning. For example, mid-sized systems with constrained water supply resources may want to follow the Advanced Guidelines.

The Basic Guidelines contain five simplified planning steps. The Intermediate and Advanced Guidelines follow nine planning steps. Within several of the steps, there are variations in the scope of the analysis and the amount of detail required. The nine steps are:

- Specify Conservation Planning Goals
- Develop a Water System Profile
- Prepare a Demand Forecast
- Describe Planned Facilities
- Identify Water Conservation Measures
- Analyze Benefits and Costs
- Select Measures
- Integrate Resources and Modify Forecasts
- Present Implementation and Evaluation Strategy

The water conservation measures are arranged in three levels. Level 1 recommends four categories of minimum measures for consideration for the Basic Guidelines. Levels 2 and 3 contain additional measures and categories, and are recommended for consideration in the Intermediate and Advanced Guidelines, respectively. The three levels and the measures included in each are:

Level 1 Measures

- Universal metering
- Water accounting and loss control
- Costing and pricing
- Information and education

Level 2 Measures

- Water-use audits
- Retrofits
- Pressure management
- Landscape efficiency

Level 3 Measures

- Replacements and promotions
- Reuse and recycling
- Water-use regulation
- Integrated resource management

The last part of the document contains six appendixes of supporting information: detailed descriptions of conservation measures, conservation benchmarks, acronyms and a glossary, information resources, funding sources, and state contacts.